

Plan Title:	Publications and Forms Design Support System
Plan Number:	CB-AS-94-01-E
Plan ID:	IT

Part I - Information Technology Architecture Plan

1. Information Requirements

The Administrative and Customer Services Division (ACSD) provides administrative services to the Census Bureau. These services include property, space, records and facilities management, and publications and graphic art services, including printing, mail and forms management, publications design, and distribution; develop generalized publications and graphics software; prepare statistical compendia such as *Statistical Abstract of the United States* and catalogs, manuals, and other reference materials; creates and distributes electronic data products, including data tapes, CD-ROM, internet, on-line services; and administers electronic and printed data dissemination and customer services programs.

We started the publications support system in FY 1986. In FY 1991, we incorporated the forms design system to automate the functions needed to compose a printed statistical volume containing text, tables, graphics, and survey forms. In order to better meet our customers' needs, we have also investigated alternatives to conventional publishing such as using CD-ROMs and the Internet. These alternatives show considerable promise and we expect they will play an important role in future publications and forms management.

2. Planned Processing and Telecommunications Architecture

We use the Census Bureau's mainframe and minicomputer systems to produce tables for major censuses and surveys. We also use a Xyvision front-end photocomposition system, an Interleaf graphics subsystem, a microcomputer-based electronic forms design system, a microcomputer-based CD-ROM premastering system, and a minicomputer-based management information system. We can accept page and form images into the publication and forms design process electronically from mainframes, minicomputers, or personal computers connected to the Census Bureau-wide network. All systems accept ASCII, WordPerfect, PostScript, and other file formats as input. From this input, we produce laser printer proof pages of an entire volume and return it to the sponsor over the Census Bureau-wide network. We intend to beta test a means of conducting the sponsor review process via the internet using Adobe software to create Page

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Description Format (PDF) files. We also transmit phototypesetter files directly to the Government Printing Office (GPO) over a high speed T1 line.

The current forms design software is adequate for our current needs and we do not plan to replace it until the life cycle of the present hardware in use becomes obsolete . We expect to use the existing equipment, acquired during FY 1995, to support current survey programs, the 1997 Economic and Governments Censuses.

We plan to continue our modernization of the CD-ROM premastering system initiated during FY 1996. Some components have been in service since 1990. Although complete renovation is unnecessary, we will need to procure several additional components.

3. Security

We will comply with all the security mandates provided by Title 13 of the United States Code and with Office of Management and Budget Circular A-71.

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Part II - Annual Plan

1. Architecture Status

We have investigated alternatives to conventional publishing over the past three years. This past year we did extensive testing using the Adobe suite of software products, consisting of Acrobat Exchange, Acrobat Distiller, and Acrobat Reader. With the use of these Adobe products, we can produce publications and forms in Adobe's PDF for dissemination on the Internet. Currently, a small collection of forms and publications is available for internal Census browsing on the ACS D IDEAL Internet site. The next phase in our Internet electronic publishing initiative is to put on-line a subscription service for public access by the depository libraries, paid subscribers, and others. The subscription service will make available all Census publications in a cover-to-cover format that can be output to cassettes, floppy disks, or CD-ROMs for sale to the public.

At present, we restrict use of this system to Bureau personnel, but there is no physical barrier to its broader use. Once an interactive publication file is created, it can be output in the same manner as any other computer file. It could be accessed from the Internet, sent directly to depository libraries via telecommunications lines, or logical groupings of publications could be written to cassettes, floppy disks, or CD-ROMs for sale to the public. In the coming months, we plan to continue development work on the publications database itself and investigate telecommunication capabilities with the Bureau's Telecommunications Office.

We also plan to investigate the feasibility of using the Internet to transmit jobs to printing contractors and the use of magnetic media, i.e., CD-ROMs, tape cartridges, diskettes, etc.

During the past four years, we have implemented user oriented forms design software. We foresee a future electronic forms system that will provide maintainable technology, adapt to increased customer demand for color work, and can expand to meet the requirements of the 1997 Economic Censuses and the 2000 decennial census.

2. Information Technology Objectives

Our IT objectives for FY 1997 are to:

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- Fully implement for public use the publications subscription service
- Implement the on-line electronic forms system for Bureauwide access
- Upgrade and enhance web publishing capabilities
- Fully modernize the CD-ROM premastering system

Our IT objectives for FY 1998 are to:

- Expand the publications subscription service
- Enhance the on-line electronic forms system
- Re-engineer the electronic publications process

3. Status

A. Accomplishments/Progress

During FY 1996 we continued setting up the Census subscription service, which we will provide to customers on a trial basis to subscribers until the decision is made to fully implement the service. We acquired more hardware and software during the past year than anticipated largely because we had unanticipated savings from the graphics and forms design hardware upgrades.

Also, the additional acquisitions were dictated by the changing direction of Bureau strategic objectives as it relates to Internet development.

B. Current Plans

With full implementation of the subscription service, which is currently in the initial phase of implementation, we expect to reduce overall publications printing costs. The current forms design system was expanded through a partnership arrangement with the Economic Area. They provided five workstations that were upgraded to Amgraf specifications, thus allowing the five Economic Area employees to work directly on the Amgraf system.

We do not believe that the present front-end photocomposition system is adequate for the upcoming 2000 decennial census. We feel it can be replaced with a system that has fewer but more powerful components, and can support our workload for the next five years. An upgraded system would accommodate increased work requirements related to production of web documents using decreased staff resources. The current system does not have the capability to incorporate color into the production of publications, this is essential for the increasing use of web publishing for Census publications. Eventually, we expect to reduce the volume of printed publication products by approximately 80 percent.

4. Implementation Schedule

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Publications Support (Interactive Graphics)		
Milestone	Start	Complete
Prepare Requirement Initiative	FY 1994	FY 1994
Acquire System	FY 1995	FY 1995
Prepare Requirement Initiative for Upgrade	FY 1997	FY 1997
Acquire Upgrade	FY 1998	FY 1998

Forms Design		
Milestone	Start	Complete
Prepare Requirement Initiative	FY 1995	FY 1995
Acquire System	FY 1995	FY 1995
Prepare Requirement Initiative for Upgrade	FY 1999	FY 1999
Acquire Upgrade	FY 2000	FY 2000

5. Acquisitions

ACTUAL AND PLANNED ACQUISITIONS			
Type of Equipment	Quantity Acquired in FY 1996	Quantity Planned for FY 1997	Quantity Planned for FY 1998
Personal Computers	3		
Raster Image Processor (RIP)			1
Contract Maintenance Support	\$40,000	\$40,000	\$40,000
Front-end Upgrade			1

